REMARKS

Reconsideration of the Office Action is respectfully requested.

The present invention is directed to an improved electric lamp wherein electric contact members in the lamp base and current supply wires are fastened to each other by means of a solidified connection body comprising aluminum silicon. In the structure of the invention, the contact members and current supply wires are fused to the solidified connection body. Additives in very small amounts may be added to the aluminum and silicon of the connection body.

The AlSi connection body has a lower melting temperature than substances used in the prior art and thus during manufacture there is less thermal load placed on the base portion and therefore less risk of deformation and the occurrence of rejects.

The claims stand rejected as being anticipated under 35 USC 102(b) by U.S. Patent No. 3,885,186 to Vause. This rejection, as it applies to the new claims presented herein is respectfully traversed.

While Vause discloses using a material including Al, Si, & 4% Cu in a non-preferred embodiment as a solidified connection body in a lamp (the preferred embodiment is Al and Zn), the structure of the Vause joint is totally different than in the present invention. Thus, in Vause, the material of the connection body is always kept below its melting temperature (col. 2, line 1) and is arranged to be in a superplastic state in which it can flow between the surfaces to be joined when exposed to infrared radiation. As stated in col. 2, lines 4 and 5 of Vause,

"no melting is involved".

Thus, in Vause there is no fusion between either the contact and the connection body or the current supply wire and the connection body.

On the other hand, in the present invention, the connection body is melted and there is a fusion between the contact and the connection body (page 3, par.s 1 and 2; page 5, par. 1), and the current supply wire and the connection body. Thus, a very secure joint is obtained.

New independent claim 4 includes the limitation that each electric contact member and a respective current supply conductor are fused to a solidified connection body. Such limitation is not shown by Vause, and furthermore would not be obvious since Vause teaches away from this structure in specifically requiring a superplastic state with no melting.

Hence, it is submitted that independent claim 4 as well as all claims dependent thereon are patentable.

The references cited as being of interest have been reviewed, but they do not relate to lamps and do not render the present invention unpatentable.

In view of the above, a Notice of Allowance is respectfully solicited.

Respectfully submitted,

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APPENDIX
Version of Amendments with Markings to Show Changes Made

In the Claims:

2. (Amended) An electric lamp as claimed in claim [1] 4, characterized in that said additive comprises 11 to 13.5% by weight of silicon.

3. (Amended) An electric lamp as claimed in claim [1] 4, characterized in that the connection body comprises a eutectic mixture of aluminum with approximately 12.5% by weight of silicon.

In the Abstract:

[ABSTRACT:]

ABSTRACT OF THE DISCLOSURE

An electric lamp with a simple welding/brazing connection comprises an electric element (2) in a translucent lamp vessel (1) with current supply conductors (4,5) and a lamp cap (6) connected to the vessel (1) and having a shell portion (7) and a base portion (8) carrying an electric contact (9). The current supply conductor (4,5) passes through the surface of this contact (9) to the exterior and is welded/brazed to it by means of a solidified connection body (10) of aluminum with a dope of silicon in an amount ranging from 5 to 16 % weight.

[Fig. 3]